November 2012 Weather Summary

November saw a continuation of the dry weather experienced in October and provided the least amount of precipitation of any month of the year so far. Although temperatures were near average, precipitation was recorded at the Seward airport weather station on only three days of the month. When tallied with October, that equates to a total of 49 days (80% of October and November) with no measurable precipitation at the Seward airport for both months.

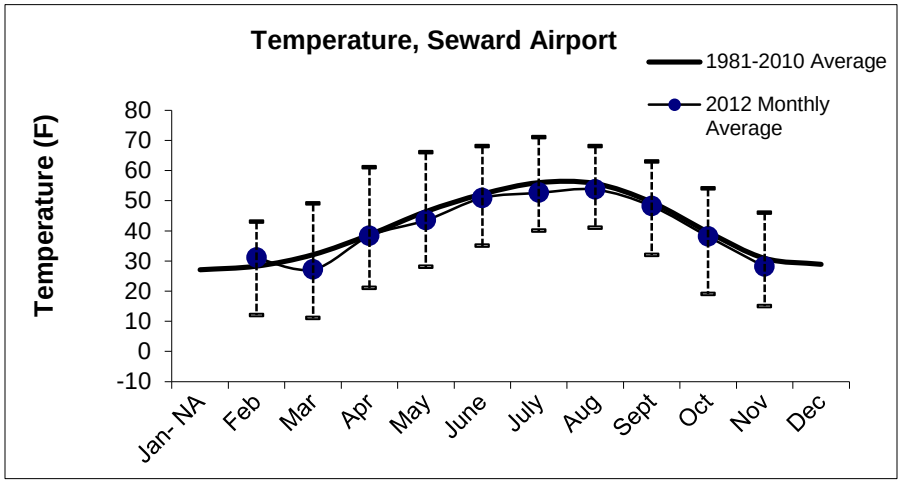
As recorded at the Seward airport, total precipitation for the month was .55 inches (8% of normal), 6.76 inches below the 30-year average (1981-2010) for the month. Although it felt like an extremely dry month with the potential for setting a new low record for monthly precipitation, it did not. There have been a total of eight other years in the past when November was drier than 2012. The monthly average temperature for November was 28.1 degrees F; 2.8 degrees F below the 30-year average. November 19th was the windiest day of the month at the Seward airport with an average daily wind speed of 24.7 mph and a 5-second wind gust of 49 mph.

Also of note:

- The National Weather Service Climate Prediction Center's three month weather outlook (December-January-February) favors below normal temperatures and below normal precipitation for the Kenai Fjords area, indicating a continuation of cool and dry conditions throughout the 2012-13 winter.
- Cold, dry conditions in November provided numerous nights for hoar frost development in the mountains and have resulted in a thin, weak, unconsolidated base for the winter's snowpack to form on and, eventually, avalanches to slide on. To learn more about local avalanche conditions, see the Chugach National Forest Avalanche Information Center.
- Climate Watch magazine reports a record low spring snow cover in the Northern Hemisphere in 2012. The exception to this was the Prince William Sound area where several all-time record snowfalls were recorded. To read more and see a map illustrating the snow depths, click here.
- Cool, dry conditions can allow glacial flour deposited along river valleys to dry out and become airborne. NASA captured this scenario last month with satellite-based imagery documenting a plume of Copper River dust over Prince William Sound.
- New research in the journal *Nature Climate Change* indicates that the advancement of trees into Arctic tundra resulting from warmer temperatures may contribute to atmospheric carbon levels as release of carbon from increased belowground decomposition may be greater than the increased aboveground carbon storage.
- A new documentary, *Chasing Ice*, incorporates time-lapse photography to record glacial change, resulting from climate change, across the Arctic, including southern Alaska.
- The World Policy Institute blogs about the Arctic as a "portent of the future" in a world experiencing climate change.
- NOAA climate services portal serves as a single point-of-entry for NOAA's extensive climate information, data, products, services, and the climate science magazine *ClimateWatch.*

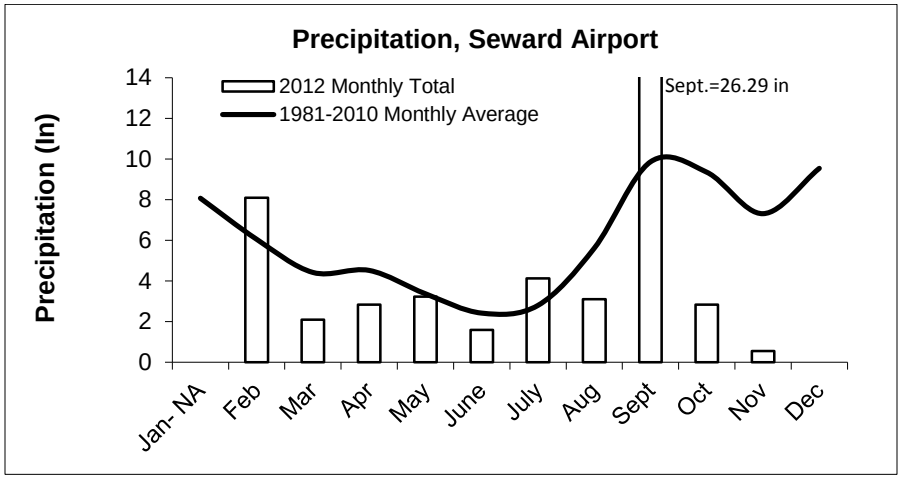
Read more to find out about the local climate for November 2012

Seward Airport Temperature, November 2012 (station 26438)



Monthly and 30-year average temperature (F) at Seward airport. 2012 monthly average values are shown with a thin solid line. The range of maximum and minimum daily temperatures for each month are shown with dashed vertical lines.

Seward Airport Precipitation, November 2012 (station 26438)

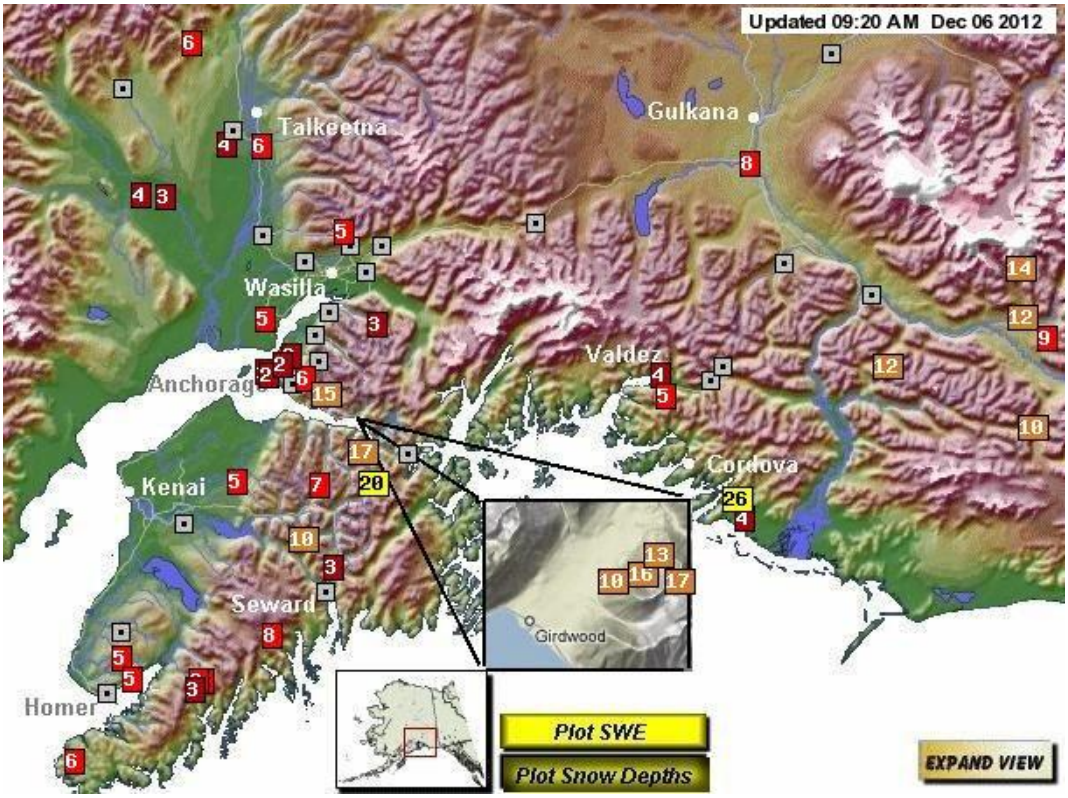


Monthly and 30-year average precipitation (inches) at Seward airport. While September's precipitation was off the chart, October and November's were well below normal.

Rivers

Resurrection River *at Exit Glacier Bridge is monitored by the Alaska-Pacific River Forecast Center: http://water.weather.gov/ahps2/index.php?wfo=pafc. Resurrection River is currently below the flood action stage.*
Exit Creek *water level (stage height) data is not collected in the winter.*

Snow & Ice



Snow depths reported across southcentral Alaska on Dec. 6th: http://aprfc.arh.noaa.gov/sd_pafc_sites.html. Snow is monitored by the Natural Resources Conservation Service: http://www.ambcs.org/ with most measurements and reporting taking place December to May.

Snow depth at Exit Glacier on November 29th was 6.7 inches with a water equivalent of 2 inches. The dry, unconsolidated crystals in the snowpack were more characteristic of an interior climate and exhibit the variable nature of the Exit Glacier area as a zone of transition from a maritime to an interior climate.

Weather Station data (map of [some] stations Western Region Climate Center or MesoWest)

Seward Airport	Seward Hwy MP#12	Pedersen Lagoon
Grouse Crk Divide	Exit Glacier	
Exit Glacier SNOTEL	Harding Icefield	
McArthur Pass	Nuka Glacier	
Pilot Rock	Buoy 76-Cape Cleare	

Weather Forecasts

Seward Summary	Graphical Forecast
Marine Forecast	4-8 Day Forecast
Surface Map	